IN THE CLAIMS:

A complete listing of the claims is set forth below. Please amend the claims as follows:

1.-16. **(Cancelled)**.

17. **(Currently Amended)** Logic for generating an order plan, the logic being encoded in media and when executed by a computer operable to:

access data describing a plurality of priority levels, each priority level comprising at least one item request;

access data describing a supply chain network comprising a plurality of network components, each network component operable to supply one or more items to satisfy an item request;

access data about infeasible periods of time associated with one or more respective network components;

for each priority level:

for each item request of a priority level:

plan an order for an item request of a current priority level according to using the data about infeasible periods of time associated with a plurality of recorded unplannable network components, an unplannable network component being network components that are unable to satisfy an item request during respective periods of time; and

determine any additional the unplannable network components for the current priority level;

validate the additional unplannable network components; and

record the validated unplannable network components for the current priority level; and

provide an order plan comprising the orders planned for the item requests at each priority level.

18.   (Original) The logic of Claim 17, wherein a network component comprises a buffer operable to store an item.

19.   (Original) The logic of Claim 17, wherein a network component comprises an operation operable to process an item.

20.   (Currently Amended) The logic of Claim 17, wherein the logic is operable to associate [[a]] an infeasible period with an unplannable network component during which the unplannable network component is unable to satisfy an item request.

21.   (Original) The logic of Claim 17, wherein the logic is operable to determine the unplannable network components by establishing whether a network component comprising a buffer stores a number of items operable to satisfy an item request.

22.   (Original) The logic of Claim 17, wherein the logic is operable to determine the unplannable network components by establishing whether a network component comprising a resource is operable to supply a capacity to an operation.

23.   (Original) The logic of Claim 17, wherein the logic is operable to determine the unplannable network components by establishing whether a network component comprising a supply buffer is operable to supply an item to an operation.

24.   (Original) The logic of Claim 17, wherein the logic is operable to determine the unplannable network components by establishing whether a network component comprising a demand buffer is operable to store an item received from an operation.

25.-26. (Cancelled).

27.   (New) The logic of Claim 17, wherein the data about infeasible periods of time associated with one or more respective network components comprises data about infeasible periods of time that were determined for other priority levels.

28.   **(New)** The logic of Claim 27, wherein the data about infeasible periods of time associated with one or more respective network components comprises data about infeasible periods of time that were determined for higher priority levels.

29.   **(New)** The logic of Claim 17, wherein the data about infeasible periods of time associated with one or more respective network components comprises data associated with one of the network components describing a time interval during which the network component is unplannable.

30.   **(New)** The logic of Claim 29, wherein the time interval is a time interval from a previously determined unplannable time to a predetermined build ahead time.

31.   **(New)** The logic of Claim 17, wherein the recording of the validated unplannable network components comprises storing data about infeasible periods of time for the unplannable network components.